Cross-disciplinary research requires a solid foundation in a set of concepts and methods for integrating knowledge across disciplines and for incorporating practice (stakeholder) knowledge. Theory and methods for cross-disciplinary research are being developed in the emerging discipline of Integration and Implementation Sciences (I2S). This course provides an overview of this new cross-cutting discipline.

As well as a general summary of I2S, the course will provide an introduction to:
- a practical framework within which to think about integration;
- strategies for problem scoping, framing and boundary setting;
- methods of integrating across disciplines and practice areas; and
- the nature of uncertainty, diverse ways it emerges in cross-disciplinary research, and methods for managing it.

Course leaders will introduce theory and methods to help you understand and meet your particular research integration challenges (see Program Outline below). You will have opportunities to apply these tools to your own work through individual exercises, and to learn from each other through group work.

Who should attend?
This course is particularly relevant for doctoral students conducting research across multiple disciplines. If there are unfilled places, non-student researchers and staff concerned with the challenges of integrating research are also welcome.

This course is partially supported by a grant from the Higher Degree by Research Innovation Fund of the Office of the Vice-Chancellor of the Australian National University.

Program outline:

8 September 2008, 6.30-9.00pm. Dinner. University House
Welcome and introduction to the course, course leaders, and participants. Attendance is a pre-requisite for the program.

9 September 2008, 8.45am start. University House

1. Overview of Integration and Implementation Sciences (I2S). This will provide an introduction to the four domains of I2S. Real world problems not only require the integration of insights from diverse discipline and practice perspectives, but also need new thinking to determine ways forward, require effective management of knowledge gaps and uncertainties, and need effective uptake of research findings into policy and practice change. (Gabriele Bammer)

2. Integration of disciplinary and stakeholder knowledge. We will present a “taste” of concepts and methods that are useful for integrating research across disciplines and stakeholders. You will apply these concepts to your research setting and discuss your integration challenges with course leaders and other participants. (Gabriele Bammer)

3. Understanding and management of ignorance and uncertainty. We will present frameworks for understanding the nature of uncertainty, as well as the metaphors, motives and morals that characterize diverse types of uncertainty. You will be able to begin thinking as critically about what you don’t know as what you do know. You will discuss strategies for managing uncertainty more effectively in your research setting. (Michael Smithson)

4. Pulling it all together. As a group we will distill and share key lessons and insights.

4.45pm Close
Course leaders:
The course will be run by two leading researchers in the field of research integration at The Australian National University. It draws on their theoretical, empirical and applied work.

Gabriele Bammer is a professor at the National Centre for Epidemiology and Population Health. She is developing the new discipline of Integration and Implementation Sciences (I2S), which provides concepts and methods central to cross-disciplinary tackling of complex problems. I2S has four pillars: generating fresh think for intractable problems; integrating disciplinary and practice knowledge; understanding and managing ignorance and uncertainty; and providing research support for decision making and practice change (see www.anu.edu.au/iisn). She has extensive experience in research integration in tackling public health and environmental problems. She is co-editor, with Professor Michael Smithson, of Uncertainty and Risk: Multi-disciplinary Perspectives (Earthscan, 2008). She is also a Research Fellow at the Program in Criminal Justice Policy and Management, John F. Kennedy School of Government at Harvard University.

Michael Smithson is a professor in the School of Psychology. He is the author of Confidence Intervals (Sage, 2003), Statistics with Confidence (Sage, 2000), Ignorance and Uncertainty (Springer-Verlag, 1989) and Fuzzy Set Analysis for the Behavioral and Social Sciences (Springer-Verlag, 1987), co-author of Fuzzy Set Theory: Applications in the Social Sciences (Sage 2006), and co-editor of Resolving Social Dilemmas: Dynamic, Structural, Intergroup Aspects (Psychology Press, 1999), and Uncertainty and Risk: Multi-disciplinary Perspectives (Earthscan, 2008), with Professor Gabriele Bammer. His primary research interests are in judgment and decision-making under uncertainty, social dilemmas, applications of fuzzy set theory to the human sciences, and statistical methods for the human sciences.

Registration
Please complete one form per registrant. Registration will be confirmed when full payment is received. Registration fee includes GST and includes dinner, morning and afternoon tea, lunch and course materials. You must register for the whole course – a single day rate is not available. Registration payment must be received no later than Monday 25 August 2008.

Title: ___________ Name (for lapel badge): ____________________________________________________________________________________ ______________
Position & Department/School/Centre:___________________________________________________________________________________________________
Postal Address: ____________________________________________________________________ State: __________ Postcode: ____________________________
Phone: ___________________________________________________________________________________________________________________________
Email: __________________________________________________________________________________________________________________________
Special dietary/mobility needs: _____________________________________________________________________________________________________________

___ I enclose a cheque/money order for $35/$125 (circle one) made payable to The Australian National University

___ Please charge my Bankcard / Mastercard / Visa (circle one and complete information below)

Name of Cardholder: _______________________________________________________________ Cardholder Phone: _____________________________________

Total Amount: $ ____________________________ Card No: _______________/__________________/_________________/_________________________________

Expiry Date: __________________ Signature of Cardholder: _____________________________________________________________________________________

I understand that places are limited and therefore my payment is non-refundable. In exceptional circumstances refunds may be made, however 10% will be retained to cover administration costs. If there are no available places, or the course is cancelled, my payment will be returned in full.

Signature of Registrant _____________________________________________________________ Date: _________________________________________________

Briefly state your interest in or experience with research integration: ________________________________________________________________________________
______________________________________________________________________________________________________________________________________
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